

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-11. Cancelled.

12. (New) A method of routing communications data to a mobile user located in one of a plurality of data networks by a router, the router having a data store provided with data relating to characteristics of the networks and the associations between the networks, the method comprising:

receiving mobile user location information relating to the identity of the data network to which the mobile user is currently connected;

receiving and assembling from plural data packets communications data comprising a complete message to be sent to the mobile user,

retrieving from the store the associated characteristics of the data network to which the mobile user is currently connected, and the associations between that network and other networks;

adapting the complete message so as to be compatible with the retrieved characteristics, and

disassembling the adapted message into data packets and sending the disassembled data packets to the mobile user.

13. (New) A method as in claim 12 wherein the router is a home agent attached to a home network.

14. (New) A method as in claim 12 wherein the communications data comprises text data.

15. (New) A method as in claim 12 wherein the adapted communications data comprises voice data.

16. (New) A method as in claim 12 wherein the adaptation of the communications data comprises reducing its size by summarizing the communications data.

17. (New) A method as in claim 12 wherein the adapted communications data is received by an intermediary router and re-routed to the mobile user.

18. (New) A method as in claim 17 wherein the mobile user and the intermediary router are attached to the same one of the plurality of data networks.

19. (New) A digital storage medium containing computer program to be loaded on a computer to route communications data to a mobile user located in one of a plurality of data networks each with associated characteristics, such that the computer:

stores data describing characteristics of the networks and associations between the networks;

receives mobile user location information, wherein the mobile user location information includes the identity of one of the plurality of data networks;

receives and assembles from plural data packets communications data comprising a complete message to be sent to the mobile user;

adapts the complete message so as to be compatible with the associated characteristics of the data network to which the mobile user is currently connected, and the associations between that network and other networks; and

disassembles the adapted message into data packets and sends the disassembled data packets to the mobile user.

20. (New) A digital storage medium containing computer program in claim 19 wherein the computer program has been downloaded from a server and stored in digital storage media.

21. (New) A computer program stored on a medium, for controlling a computer to route communications data to a mobile user located in one of a plurality of data networks by:
receiving mobile user location information which includes the identity of one of the plurality of data networks;

receiving and assembling from plural data packets communications data comprising a complete message to be sent to the mobile user;

retrieving, from a store of data describing characteristics of the networks and associations between the networks, data relating to the characteristics of said one of the plurality of data networks;

adapting the complete message so as to be compatible with the associated characteristics of said one of the plurality of data networks and

disassembling the adapted message into data packets and sending the disassembled data packets to the mobile user.

22. (New) A data processor adapted to carry out data processing on communication data, the processor comprising:

a first receiver adapted to receive network information describing each of a plurality of data networks, wherein the network information includes data network type;

digital storage adapted to store network information;

a second receiver adapted to receive mobile user location information from a router, wherein the mobile user location information includes the identity of a selected one of the plurality of data networks;

a third receiver adapted to receive from the router communications data to be sent to the mobile user comprising a complete message assembled from plural data packets;

an information retrieval processor adapted to retrieve network information relating to the selected data network;

an adapting processor adapted to adapt the complete message so as to be compatible with the data network type of the one of the plurality of data networks and

an output adapted to disassemble the adapted complete message into data packets and output the adapted disassembled data packets to the router.